

Ocean Session: Reports

- Reports from SST, Sea Ice, Sea Level and Ocean Colour
- SST, Sea Level and Ocean Colour have completed or almost completed their round robins.
- Processing has started for Ocean Colour and Sea Level
- All three “mature” projects have significant achievements to report: conceptual developments, product improvements, science with precursor data

Expected outcome of the CCI Sea ice project

- Sea ice concentration ECV timeseries in Arctic and Antarctic from 1979 with error estimates, depending on seasons and areas, based on assessment of ≈ 10 algorithms
- Sea ice thickness ECV for the Arctic (partly) based on radar altimeter data from 1993, and assessment of ice thickness in Antarctica
- Provide more derived products for climate research: ice volume, budget, fluxes, hydrological cycle, etc.



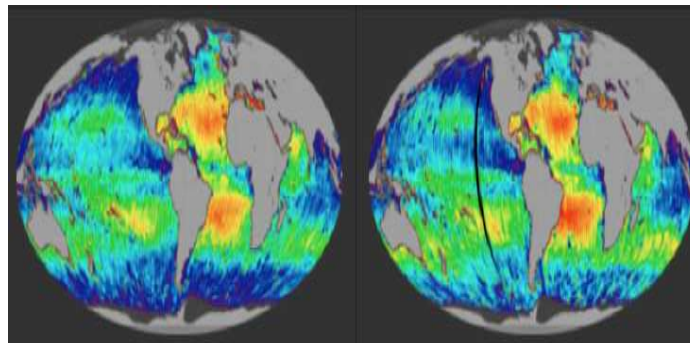
Ocean Session: Discussion

- Inter ECV connectivities (ocean ECVs and atmospheric ECVs)
- Common resolution (temporal and spatial) and projections for for L4 products (proposal: grid size to be in multiples of 0.05 degrees for open ocean; another grid for poles; two polar grids under discussion)
- Common approaches to trend analyses (see also Johnny Johannessen's plenary talk)
- Hope to return to discussion points during break out sessions today
- CMUG evaluation: how is it being done, and how will progress be estimated
- Success stories examples: algorithm selection process; selection of best algorithms; sea level budget
- Golden year prototype availability: OC-CCI and sea level (before co-location), SST (Feb 2013), Sea Ice (precursor data available now,

SST in the Earth system



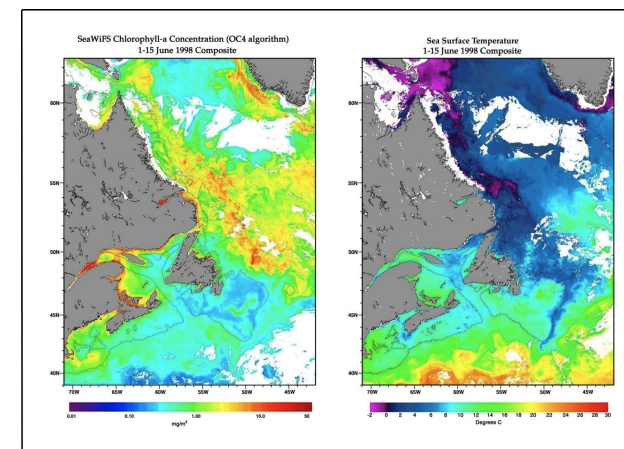
- **Global ocean dynamics**
 - Demands “higher order” SST products
 - SSH, ocean colour ... ocean winds, salinity
 - SST in support of salinity observations



Biases exist between
6 am and 6 pm
salinity from Aquarius

courtesy Gary Lagerloef

- **Marine ecology**
 - SST and Chl complementarity
- **Global ocean heat content**
 - Sea level / SSH
 - Cryosphere mass balance



courtesy of Trevor Platt

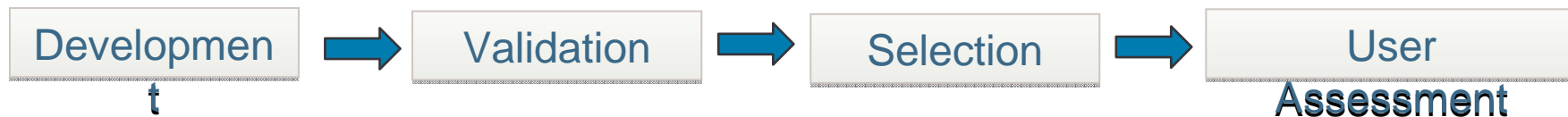
Conclusions & next Steps



- **Preparation of Phase 2:**

⇒ Approach with a RR exercise should continue

⇒ Continuity of the cycle initialized in phase 1:



⇒ Keep a close link with users

⇒ Enhance link with other international groups

⇒ Definition of common protocol at international level ?